

General

Title

Chronic obstructive pulmonary disease (COPD): percentage of patients aged 18 years and older with a diagnosis of COPD and who have an FEV₁/FVC less than 60% and have symptoms who were prescribed an inhaled bronchodilator.

Source(s)

American Thoracic Society (ATS). Chronic obstructive pulmonary disease (COPD): inhaled bronchodilator therapy. New York (NY): American Thoracic Society (ATS); 2015 May 21. 4 p.

Measure Domain

Primary Measure Domain

Clinical Quality Measures: Process

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the percentage of patients aged 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD) and who have a forced expiratory volume in 1 second (FEV₁)/forced vital capacity (FVC) less than 60% and have symptoms who were prescribed an inhaled bronchodilator.

Rationale

Inhaled bronchodilator therapy is effective in treating and managing the symptoms of chronic obstructive pulmonary disease (COPD), particularly for those patients with moderate to very severe COPD, and improving a patient's quality of life. The Global Initiative for Chronic Obstructive Lung Disease (GOLD) guidelines recommend inhaled bronchodilators as a cornerstone of COPD symptom management; however, primary care physicians (PCPs) often turn to other agents as first-line COPD therapy (Barr et al., 2005;

Foster et al., 2007). In a recent study of general medicine practices, 154 clinicians completed a survey to identify barriers to implementing seven recommendations from the GOLD guidelines. Adherence was only 54% to prescribing long-acting bronchodilators when forced expiratory volume in 1 second (FEV₁) less than 80% predicted (Perez et al., 2012).

Clinical Recommendation Statements:

For stable COPD patients with respiratory symptoms and FEV₁ less than 60% predicted, American College of Physicians (ACP), American College of Chest Physicians (ACCP), American Thoracic Society (ATS), and European Respiratory Society (ERS) recommend treatment with inhaled bronchodilators (Qaseem et al., 2011).

Bronchodilator medications are given on either an as-needed basis or a regular basis to reduce or prevent symptoms. Bronchodilator medications are central to symptom management in COPD. Inhaled therapy is preferred. Long-acting inhaled bronchodilators are convenient and more effective at producing maintained symptom relief than short-acting bronchodilators. Based on efficacy and side effects, inhaled bronchodilators are preferred over oral bronchodilators (GOLD, 2015).

Evidence for Rationale

American Thoracic Society (ATS). Chronic obstructive pulmonary disease (COPD): inhaled bronchodilator therapy. New York (NY): American Thoracic Society (ATS); 2015 May 21. 4 p.

Barr RG, Celli BR, Martinez FJ, Ries AL, Rennard SI, Reilly JJ, Sciurba FC, Thomashow BM, Wise RA. Physician and patient perceptions in COPD: the COPD Resource Network Needs Assessment Survey. *Am J Med.* 2005 Dec;118(12):1415. [PubMed](#)

Foster JA, Yawn BP, Maziar A, Jenkins T, Rennard SI, Casebeer L. Enhancing COPD management in primary care settings. *MedGenMed.* 2007;9(3):24. [PubMed](#)

Global Initiative for Chronic Obstructive Lung Disease (GOLD). Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease. Vancouver (WA): Global Initiative for Chronic Obstructive Lung Disease (GOLD); 2015. [613 references]

Perez X, Wisnivesky JP, Lurslurchachai L, Kleinman LC, Kronish IM. Barriers to adherence to COPD guidelines among primary care providers. *Respir Med.* 2012 Mar;106(3):374-81.

Qaseem A, Wilt TJ, Weinberger SE, Hanania NA, Criner G, van der Molen T, Marciniuk DD, Denberg T, Schunemann H, Wedzicha W, MacDonald R, Shekelle P, American College of Physicians, American College of Chest Physicians, American Thoracic Society, European Respiratory Society. Diagnosis and management of stable chronic obstructive pulmonary disease: a clinical practice guideline update from the American College of Physicians, American College of Chest Physicians, American Thoracic Society, and European Respiratory Society. *Ann Intern Med.* 2011 Aug 2;155(3):179-191. [62 references] [PubMed](#)

Primary Health Components

Chronic obstructive pulmonary disease (COPD); inhaled bronchodilator therapy; forced expiratory volume in 1 second (FEV₁); forced vital capacity (FVC)

Denominator Description

All patients aged 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD),

who have a forced expiratory volume in 1 second/forced vital capacity (FEV₁/FVC) less than 60% and have symptoms (e.g., dyspnea, cough/sputum, wheezing) (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Patients who were prescribed an inhaled bronchodilator (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A clinical practice guideline or other peer-reviewed synthesis of the clinical research evidence

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Ambulatory/Office-based Care

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Individual Clinicians or Public Health Professionals

Statement of Acceptable Minimum Sample Size

Does not apply to this measure

Target Population Age

Age greater than or equal to 18 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Aim

Better Care

National Quality Strategy Priority

Prevention and Treatment of Leading Causes of Mortality

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Living with Illness

IOM Domain

Effectiveness

Data Collection for the Measure

Case Finding Period

The reporting period

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Encounter

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions

All patients aged 18 years and older with a diagnosis of chronic obstructive pulmonary disease (COPD), who have a forced expiratory volume in 1 second (FEV₁)/forced vital capacity (FVC) less than 60% and have symptoms (e.g., dyspnea, cough/sputum, wheezing)

Note: Refer to the original measure documentation for administrative codes.

Exclusions

Documentation of medical reason(s) for not prescribing an inhaled bronchodilator

Documentation of patient reason(s) for not prescribing an inhaled bronchodilator

Documentation of system reason(s) for not prescribing an inhaled bronchodilator

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Patients who were prescribed* an inhaled bronchodilator

Note: Refer to the original measure documentation for administrative codes.

**Prescribed:* Includes patients who are currently receiving medication(s) that follow the treatment plan recommended at an encounter during the reporting period, even if the prescription for that medication was ordered prior to the encounter.

Exclusions

Unspecified

Numerator Search Strategy

Fixed time period or point in time

Data Source

Administrative clinical data

Paper medical record

Registry data

Type of Health State

Does not apply to this measure

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Desired value is a higher score

Allowance for Patient or Population Factors

not defined yet

Standard of Comparison

not defined yet

Identifying Information

Original Title

Inhaled bronchodilator therapy.

Measure Collection Name

Chronic Obstructive Pulmonary Disease (COPD) Measures

Submitter

American Thoracic Society - Medical Specialty Society

Developer

American Thoracic Society - Medical Specialty Society

Funding Source(s)

American Thoracic Society

Composition of the Group that Developed the Measure

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Financial Disclosures/Other Potential Conflicts of Interest

Financial/potential conflict of interest disclosed in accordance with the American Thoracic Society policy.

Endorser

National Quality Forum - None

NQF Number

not defined yet

Date of Endorsement

2015 May 21

Measure Initiative(s)

Physician Quality Reporting System

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 May

Measure Maintenance

The American Thoracic Society updates measures annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: Physician Consortium for Performance Improvement®. Clinical performance measures: chronic obstructive pulmonary disease (COPD). Tools developed by physicians for physicians. Chicago (IL): American Medical Association (AMA); 2006. 8 p. [12 references]

Measure Availability

Source not available electronically.

For more information, contact the American Thoracic Society (ATS) at 25 Broadway, New York, NY 10004; Phone: 202-315-8600; Fax: 212-315-6498; E-mail: ATSInfo@Thoracic.org; Web site: www.thoracic.org

NQMC Status

This NQMC summary was completed by ECRI on August 28, 2006. The information was verified by the measure developer on July 6, 2007.

This NQMC summary was retrofitted into the new template on May 10, 2011.

Stewardship for this measure was transferred from the PCPI to the ATS. ATS informed NQMC that this measure was updated. This NQMC summary was updated by ECRI Institute on July 29, 2015. The information was verified by the measure developer on August 31, 2015.

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Production

Source(s)

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